

Abstract

An embossing system for embossing and perforating at least a portion of a web is provided comprising a first embossing roll having embossing elements and at least a second embossing roll having embossing elements, wherein the elements of the first and second embossing rolls define perforate nips for embossing and perforating the web and wherein at least a predominate number of the perforate nips are substantially oriented in the cross-machine direction. Moreover, substantially all of the nips defined by the embossing elements of the first and second embossing rolls can be substantially oriented in the cross-machine direction. Further, the cross-machine embossing elements are at an angle of about 85° to 95° from the machine direction.